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ABSTRACT

This paper presents results of a study of sex discrimination in the culture of scuba divers. The research grew out of class related conflicts that permitted observation in ethnographic field work, the character of gender relations in the recreational activity of scuba diving. The project was intended to investigate the role of communities of practice in recreational scuba diving. To carry out the research, a local dive shop was used to conduct an ethnographic inquiry. Although much of the diving industry believes otherwise, women still face what is an abysmal set of social relations within recreational diving. Discrimination is still a rampant and insidious problem. In addition to the explicit macho character of some discrimination, discrimination takes on other more subtle modes that, while less explicit, is in some sense more damaging. What is particularly disconcerting is the control of women through their objectification. Research on the diving culture suggests that women are denied access to precisely those subcommunities that are necessary for stable participation within diving unless they submit to a subjugating relationship. The result is a high drop out rate for women divers unable to find a suitable diving partner. Through this mechanism, the diving culture is able to admit virtually any woman who is willing to pay for entry into the diving culture (via course and equipment fees), but not allow any woman participation within that culture except on its own sexist terms. (DK)

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Diving into Troubled Waters:

Sexual Discrimination in a Male Dominated Recreational Culture

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Presented at the 1993
American Educational Research Association Conference,
Atlanta Georgia.

Diving into troubled waters:

Sexual discrimination in a male dominated recreational culture*†.

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ABSTRACT:

The plight of women in our society is very much subject to interpretation. While that might seem to be a most unfortunate fact, it is nevertheless an important aspect of the hermeneutical character of feminist scholarly work (McCalla-Vickers, 1982). This work grew out of class related conflicts that permitted the author to observe in ethnographic fieldwork the character of gender relations in a recreational activity: scuba diving.

As much as the diving industry might think otherwise (Bondy, 1993), women still face what is an abysmal set of social relations within recreational diving. Discrimination is still a rampant and insidious problem. In addition of the explicit macho character of some discrimination, discrimination takes on other more subtle modes that while less explicit is in some sense more damaging.

However, what is particularly disconcerting is the control of women through their objectification. Research on the diving culture suggests that women are denied access to precisely those subcommunities that are necessary for stable participation within diving unless they submit to a subjugating relationship. Through this mechanism the diving culture is able to admit virtually any woman who is willing to pay for entry into the diving culture (via course and equipment fees), but not allow any woman participation within that culture except on its own sexist terms.

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* The author would like to thank the following individuals for their assistance in developing the ideas presented here: Professor John David Miller, Professor Rogers Hall and his "Practice" research group, Professor Judith Warren Little, Professor Lawrence Lowery, Professor Jean Lave, Professor Martin Packer, Professor Mary Elizabeth Brenner, Margret S. Carlock, Lloyd Austin, Dr. Brigitte Jordan, Dr. Etienne Wenger, and Professor Michael Ranney and his Reasoning research group.

† Section-3 represents an updated version of the paper: "Women & men and the diving culture" which was originally presented at the 1992 Seaviews Symposium and subsequently published in the SSI Bulletin.

1) Introduction, the problem of establishing one's hermeneutic "vantage point".

> There are only two men who will dive with a woman diver: the man who dates her and the man who wants too. (a woman divemaster (assistant instructor))
>
> We are here to discuss what differences exist between the sexes, not to imply that there are vast problems. On the contrary, men and women divers in general interact in harmony (a paraphrase from a male participant at a roundtable discussion on gender and diving, the Seaviews-93 conference Oakland, California)

In this, the Year of the Woman, we find ourselves bombarded with a rather schizophrenic sense of the condition of women in the world. Some of this difference can be accounted for in terms of domain being considered. Certainly some cultures are more abusive of women than others, and even within our own culture the plight and circumstances of women varies widely. However, as demonstrated above, even in relatively fixed and well specified domains there can be a wide variation in opinions.

We all carry a set of cultural expectations that demands a single objective answer to questions like: "are women treated with equal respect and sincerity?". However, that is assuming that knowledge is indeed hard and objective (Burke, 1985). In these waning years of the 20th century we find an increasing interest in a postmodernist perspective on the status of knowledge (Star, 1991). That interest can be found a surprisingly diverse set of disciplines from Philosophy and literary criticism (Ricoeur, 1981), to anthropology and sociology (Bourdieu, 1972), to even analysis of the so called "hard sciences" (Kuhn, 1962; Latour & Woolgar, 1979). Such a point of view is quite amenable to feminist scholarly work (McCalla-Vickers, 1982), but it also presents the feminist cause with its most fundamental challenge: the problem of seeking a vantage point as undistorted by male dominated culture as possible.

There are times when it seems necessary to assume a "bird's eye view" on human affairs at least as a matter of rhetorical style; however, when it comes to issues of method it truly becomes critical to consider not only the hermeneutical nature of the task of research into any human enterprise (Packer & Addison, 1989) but to consider the voice of the author in that enterprise (Peshkin, 1988).

1.1) The domain, the voice, and the perspective. The research into gender issues described

here is the unexpected consequence of not so much a gender conflict, as a class conflict. The research project in question was intended to investigate the role of communities of practice (Lave & Wenger, 1992) in recreational scuba diving. To carry out this research, I went to work at local dive shop in order to conduct an ethnographic inquiry. As an observer, I carried with me my own history and trajectory of participation in the world. Of importance here was the fact that I was raised as a middle class white collar child and completed all my college work at a politically progressive and in general "feminist-friendly" university (at least in comparison to other schools).

The environment that I entered into carried a rather different history and "shop culture". *Rockfish scuba* * is a multi-store chain in Northern California. While the location of the store I worked in was in a comparatively "yuppie" region of the state, the store itself bore marks of the chain's history. To start with, while it appears that this store had been opened in order to attract more upscale customers to the chain, the store itself was located in a older, less affluent part of town. The neighborhood included ethnic stores catering to Asian and Hispanic Americans, and also was home to discount warehouses, automobile repair shops, and fast food restaurants.

All this probably made the store more comfortable to the oldtimers who would frequent the new location because it was more convenient than the first store which was opened in the dawn of recreational diving at the edge of one of what is now a moderately high crime area. That first store, like the neighborhood it is situated in, carries working class blue collar values. The original owner and employees all carried those roots and from those early days came a history and tradition in keeping with working class underwater hunters and diving tinkerers (Eyles, 1985; Ingalls, 1953).

It is the clash between these two perspectives that the gender issues to be discussed here were revealed, and it is important to consider why that difference in perspective is important. Certainly it represents a partial answer to the question of how I can be expected to contribute to the understanding of state of women in this field - given the fact that I am a man. More importantly, it provides some sense of what are the cultural blinders that I carry. While I found myself quite sensitive to the cruder types of sexual discrimination and harassment, it is all together likely that I

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* The name *Rockfish Scuba* is a pseudonym to protect those who were/are actually involved with the ethnography site. Pseudonyms will always be used with the exception of non-region specific institutions.

would be blind to examples arising from my own socio-historical roots. Equally it goes without saying that this perspective is of a man. There are issues and aspects of being a woman that I simply cannot have any sense of. At the same time, being a man provides me a distinct vantage point that perhaps could illuminate the blind spots of a woman researcher in the same circumstances. Within a hermeneutical research framework, there is no such thing as a wrong perspective, only perspectives that are more or less useful for the task at hand. With this in mind, the following is one perspective on the condition of women within the culture of recreational diving.

2) An introduction to the institutions and culture of recreational diving. As in more general educational settings, there are two stories that can be told about how one becomes a diver. It is clear that the recreational diving industry wants the public to believe that one can realistically and sincerely "buy" one's entry into diving. That isn't to say that some work isn't required from the interested party, but with some modest investment of time and studying, more or less anyone in reasonable physical and mental condition can become a scuba diver (for somewhere between $600 and $1000).

However, what that really buys you is something rather different. What the so called "open water" certification class provides for its graduates is access to compressed air. Back in the early days of recreational scuba diving, there were no restrictions on who could dive. The results were many deaths and injuries (Waller,Caplan, & Lowe, 1964). Faced with the threat of government regulation, the diving industry developed its own regulating scheme in which certification cards would have to be shown at locations providing either air fills or scuba rental equipment. Since without air, scuba divers can't dive, this served as an effective chokehold for forcing compliance.

The nature of this chokehold effectively dictates the nature of the certification course. Because certification cards never expire and cannot be revoked, certification agencies basically get one and only one chance to teach divers all the safety skills they might ever need to know. Thus the bulk of the course consists of precisely that sort of instruction.

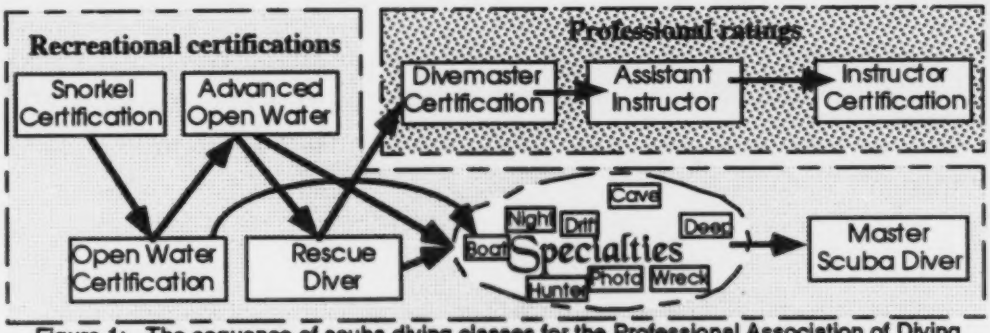

Figure 1: The sequence of scuba diving classes for the Professional Association of Diving Instructors (PADI). Other certification agencies basically offer an equivalent sequence

The problem with this scheme is that there is much more to diving than safety issues. While the certification agencies are aware of this and do provide an extensive scheme of continuing education (see figure-1), very few divers actually go beyond the certification class since there isn't an equivalent incentive. That lack of incentive combined with the economics of teaching dive classes has the effect of greatly undermining the coherence of any proposed curriculum. While the top sequence of figure-1 suggests a rather strict course hierarchy for obtaining a professional status certification (to become involved in teaching other divers), the bottom half is much more muddled. While it might appear that there is sequence from advanced to rescue to specialties to master scuba diver, the reality is that most of the specialties can be taken directly after the open water certification (PADI International, 1991a). Viewed in this way, the so-called "master scuba diver" is nothing more than a somewhat arbitrary collection of specialties grouped for convenience and prestige. This lack of focus for recreational diving continuing education is significant because it clearly means that the recreational community cannot use that structure as a model to build on.

Examining the community of recreational divers from the emic point of view provides a much more coherent sense of what recreation diving is all about and how divers proceed to learn about it. Figure-2 represents a participation roadmap for the recreational diving community in Northern California. It is based on both ethnographic observations and various landmark institutions in the local diving cultures (dive clubs, well known dive figures and so on).

The figure captures the central distinction within the diving community between 'sightseeing' and other forms of 'specialty diving'. Specialty divers represent more mature

individual because apparently they have not only mastered the art of diving, but have gone beyond that to carry out particular activities under the water. The importance of taking on a specialty is not all together clear. There is certainly a socio-historical precedence. Underwater hunters existed before there were scuba divers (Eyles, 1985). It also seems clear that it is an important part of a diver's identity to have some specialty mastered.

Personal experience with diving suggests that there is a very simple reason: just plain diving is boring. Scuba equipment plays something of the role of a car, it is a mechanism to go some place that could not otherwise be accessed. However, like a car, scuba equipment becomes a waste if not used to do something beyond simply using it.

This isn't to say that there cannot be a community of diving practice where the practice is sightseeing, but its lack of any purpose does suggest that it might be less stable. Also, the lack of "directedness" in sightseeing poses an interesting question to an analysis using Legitimate Peripheral Participation (Lave & Wenger, 1992). Since sightseeing does not admit to degrees (there isn't a better or more central way to underwater sightsee than any other), it isn't clear how one could find any directionality from the outside to full participants.

Levels of Peripheral Participation in the Community of Scuba diving

Setting: Northern California circa 1990

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Created 8/27/91 <--> Revised 4/7/93

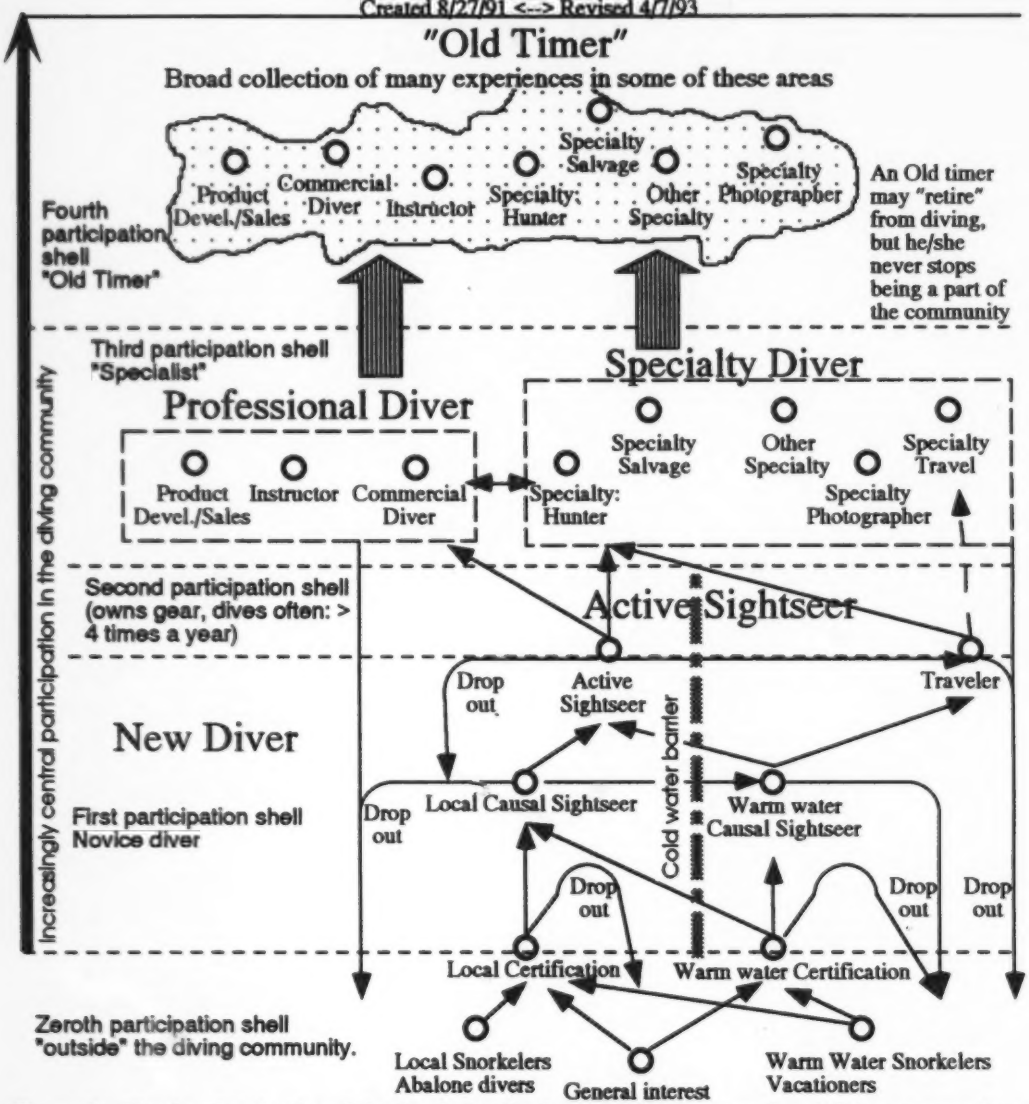

Figure 2: The four levels of participation in the Northern California recreational diving community as inferred from ethnographic observation.

Figure-2 implicitly claims that there is no stable region of diving participation that involves only sightseeing. Instead, it views taking on a specialty interest as the critical transition to a more permanent membership in the community of scuba divers. Once one has established one's reputation within a particular specialty community, it is possible to make a transition to another specialty. This is due to the fact that many divers belong to more than one subcommunity. After making a few transitions and in general getting to know the diving community, one may make the last possible transition in the model to "oldtimer". Oldtimers have a diverse set of experiences in a wide range of diving activities, and like our general society notion of an oldtimer, they are more than willing to share that experience in the form of stories. Oldtimers are unique in that like retirees they are free to participate or not participate in diving as they wish. Many cannot or will not dive because of age and/or disability (including injuries caused by diving). Others return to the gentle pastime of sightseeing because it is less strenuous than specialty diving, and that is enough to relive memories, or perhaps to share diving with a younger friend or more often family member. Still, other oldtimers can be found continuing to take on some particular specialty no matter what the physical or mental difficulties.

Thus, scuba diving as a general pastime seems to have a structure moving from more peripheral to more central participation, in keeping with the Lave and Wenger characterization (Lagache, in preparation). From this perspective, completing a certification class is only a start on the battle women must make to truly become successful participants in diving.

2.1) A review of the literature on women and diving. There is a slowly increasing awareness of the growing presence of women in diving. This has generated a number of books and magazine articles on the subject of women and diving. However, virtually all these materials focus mainly on the physiological differences between the sexes and their possible impact on diving (Bangasser, 1980; Kizer, 1990; O'Neill & Morgan, 1992; Taylor, 1990; Vann, 1990; Vick, 1990; Viders, 1993). This material has been relatively non-controversial and does largely support the point of view that women can be full participants in most recreational diving. Some differences do exist, in particular related to differences in male and female aerobic output and sheer physical strength. On the other hand, women in general have some significant advantages such as a lower air consumption.

The existing literature does not however provide much insight into the differences in

psychology and more importantly sociology. Viders reports that studies have debunked the myth of women divers being more likely to panic in a given situation (Viders, 1993). O'Neill and Morgan take a more cautious view of this question and devote a chapter on "The emotional you". However, both Viders and O'Neill and Morgan approach the problem from the need to "fit in" with the existing dive practices. The Viders result claims that women are just like men, O'Neill and Morgan provide strategies so that women can be.

On the thornier question of sociology, there is indeed very little material. Viders and Bondy's strategy is to briefly acknowledge the existence of difficulties and then provide "existence proofs" in terms of exemplary women divers that these problems can be overcome. One topic which is focused upon by Viders, O'Neill and Morgan, and Bondy is the need for women to become so called "self-sufficient" divers. While there is instructional value in this suggestion, the recipe for achieving this is to separate women from any male relations (significant others, relatives, etc.) during instruction. This well intentioned move may have very negative consequences as will be discussed later. This proposal alone suggests a rather naive sense of the social and culture forces confronting women in diving.

Where socio-cultural issues are discussed, not surprisingly they are discussed in terms of local problems and not in terms of their global coherence. O'Neill and Morgan discuss sexism in terms of stereotypes about what dive gear is appropriate for women and unequal treatment in classes. On the other hand they do little to combat some stereotypes and actually appear to support others, to quote: "Women have always been known for their social graces, gentle spirit, and the gift for civilizing any situation" (O'Neill & Morgan, 1992). Bondy offers her own bit of sexism with the claim: "Women are helping to make the diving world a 'kinder, gentler' place" (Bondy, 1993). While Bondy's comments do seek to deal with some interesting and important issues, taken at face value they actually strengthen the claims of the chauvinist establishment.

There have been some who have taken on the diving establishment for exploitative and discriminatory practices. Woman Diver, a quarterly newsletter has taken on the establishment in such areas as exploitative advertising (Woman Diver, 1991), and the risk of sexual assault. There are even the rare occasions when even male dominated elements of the diving establishment recognizes the existence of real and broad based problems in the treatment of women (Sheckler,

1992). However, the common thread in the materials reviewed here is the hegemonic failure to perceive any systematic exploitation. This hegemony the diving culture appears to inherit from the larger social order.

2.2) The institutional barriers or non-barriers to entry, a look at the political-economy of recreational diving. As described earlier, there is one institutional chokehold in the recreational diving industry; that is the open water certification class. Obviously, if there could be an institutionally linked bias in the way women are brought into diving, that link would have to appear there.

However, not only is there none, but basically there has never been any. The reasons for this are perhaps beyond full reconstruction, but some socio-historical factors do suggest that diving is different from many other institutions in that respect.

First, is it important to note that certification classes are in fact a relatively new phenomenon. The first diving instructional programs began in the early 1960s and the first certification agency, (the National Association of Underwater Instructors, or NAUI) was formed in 1960. By the time recreational diving had established themselves in the mid 60s, the country was already in the midst of great social revolution that already included gender equality on the agenda.

Second, scuba diving had already developed a considerable macho culture during its short history. One branch of the diving culture, the underwater hunters can trace its "tribes" back to the late 1920s and early 30s when men took on the ocean in breathhold or in its legendary name: "skin diving" (Eyles, 1985). Both because of its genuine physical rigors and hyperbolized masculine exploits there was already a considerable cultural stigma against women participating.

Yet, ironically it is precisely this macro character that basically necessitated a gateway for women to enter into diving. Certainly one necessity for the virile male is a suitable female to "take care of", and in certain circumstances that extended to bringing that companion into the aquatic world. The precise reasons for this probably would require an exhaustive socio-historical investigation, but two factors appear to have played an important role: the role of women in advertising scuba equipment and the allure of warm water diving sites.

Amazingly the use of women in advertisements for scuba equipment predates the 60s. Certainly, the use of women in other advertising targeted for males was commonplace and had been for decades. However, scuba diving presented a unique dilemma to the advertiser. Unlike say an automobile where a woman model can be displayed like another part of the upholstery, a woman cannot be displayed realistically in an underwater scheme (mermaids and Ester Williams scenes aside). Thus, in order to permit the all important element of sex-appeal in advertising, the diving industry created the image of the beautiful lady diver, and that image remains with us to this day.

It is important to note that what the dive industry sold was not simply the vulgar selling of sex. In keeping with a "kinder and gentler" time, they sold the romantic image of a shared activity. That romantic image was only enhanced by the very real nature beauty to be found in the depths below.

The existence of tropical dive sites with both unburdened and spectacular diving only provided the advertisers with the ideal backdrop for their glosses, and only added to the romantic allure of diving. What made the tropics suitable in advertising lore was in fact a dream that seemed truly practical. Thus, male divers began to seek to involve their significant others in diving, and that opened the precedent for women divers.

This is not to say that there weren't women divers even in those early days who sought to dive purely for its own sake. The problem wasn't at the level of interest, it was at a level of cultural acceptance. While women were allowed to take certification classes, this did not mean that they had unlimited access to all aspects of the diving community. Still as noted earlier, since diving at its roots was very much a male pastime, it is no small miracle that women were allowed access at all!

Local surveys indicate that the number of women certified is now approaching that of the general population at 40%. This number is in agreement with other national studies (Bondy, 1993). While this might seem to be an encouraging trend such enthusiasm alas needs to be tempered in light of both the economics of the diving industry and the realities of the diving culture (see figure - 4).

The best way to understand the situation is to ask the pessimistic question why is the rate of women certifications so high? Alas, there is a very plausible answer having to do with diving economics. A factor that seriously impacts the diving manufacturing industry is that most of what it produces (particularly its more expensive items) are durable goods. A diving exposure suit can last 5 years or more, a scuba regulator a decade or more. Scuba tanks continue to be serviceable after 30 years of use or more (Shreeves, 1988). Even simple items like a diving mask can give many years of good service.

While, it is more likely that active divers will replace most of their equipment within 5 to 10 years of purchase, this still means that sales from the active diving community will only represent 1/5th to 1/10th of that active population. On the other hand, every new diver brought into the system will need equipment, thus it appears to be much more in the economic interest of the diving industry to generate new divers than to keep old divers active. The diving retail industry is to some extent in a similar position. Since retail profits are proportional to the costs of the items sold, retail centers also benefit more from new divers than existing divers.

It would be inappropriate to suppose that the retail store owners deliberately seek to exploit new divers. Ethnographic data simply doesn't support this. On the contrary at both ethnographic sites closely observed consumer service was at least as important to the owners as the managers and employees. Nevertheless, the dive retail industry had adapted to the greater profitability from new students through the emergence of new local practices. As illustrated by figure-3, these forces arose somewhat independently, at different times in the history of recreational diving, and from different players in the dive industry, but they all ended up "pulling up" the number of new divers certified.

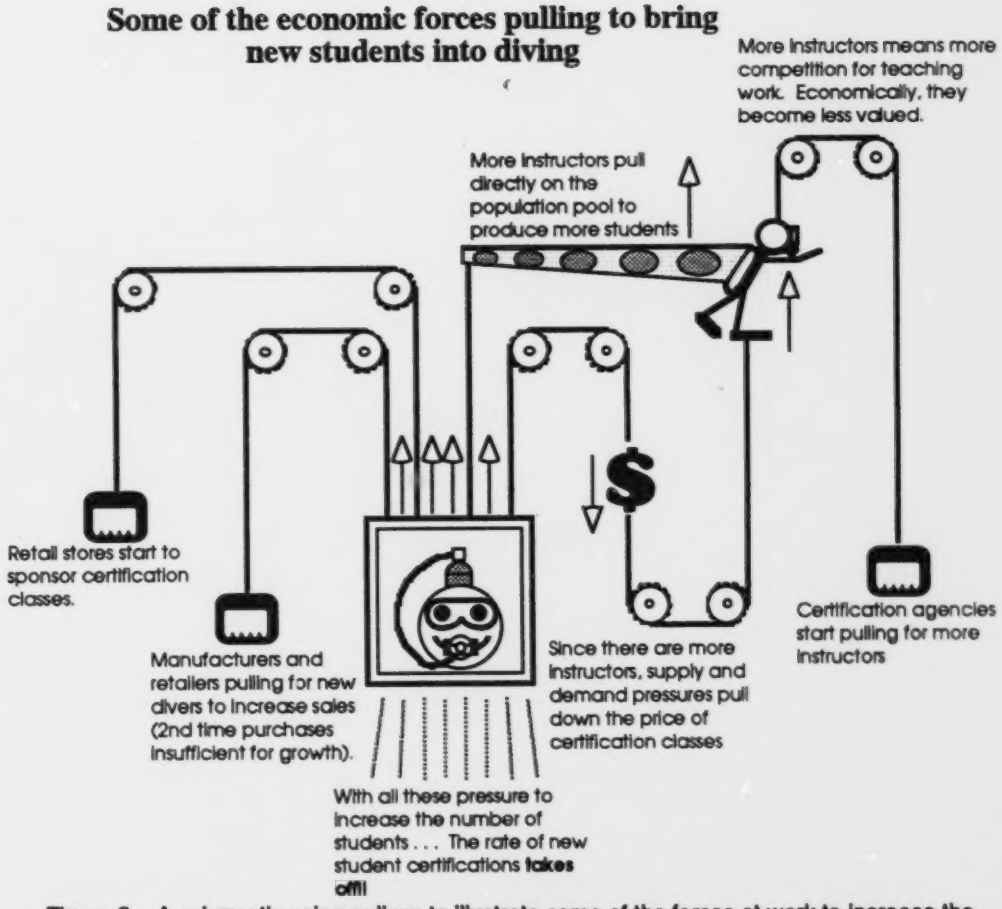
Some of the economic forces pulling to bring new students into diving
More instructors means more competition for teaching work. Economically, they become less valued.
More instructors pull directly on the population pool to produce more students
Retail stores start to sponsor certification classes.
Manufacturers and retailers pulling for new divers to increase sales (2nd time purchases insufficient for growth).
Since there are more instructors, supply and demand pressures pull down the price of certification classes
Certification agencies start pulling for more instructors
With all these pressure to increase the number of students . . . The rate of new student certifications takes off!

Figure 3: A schematic using pulleys to illustrate some of the forces at work to increase the number of new divers certified

The first shops to sell diving equipment weren't stores dedicated to the sport. Rockfish Scuba started off selling golf material before World War II. Once diver certification became mandatory, it was certainly no surprise that kinships developed between instructors and dive stores. However, for many years the relationship was limited to dive stores providing referrals to instructors they knew and trusted, and instructors returning the favor. Rockfish scuba remained that way until the early 80s. However, the next logical step was for dive store to sponsor their own dive classes and hire their own instructors. This arrangement was helpful to all concerned: the shop received much more direct access to the dive student, the instructor benefitted from the stores

reputation and advertising, and the student became able to "shop around" for dive classes like any other retail product. However, this transformation also provided the impetus for increasing the number of new students certified, since dive stores soon discovered that their profits were strongly related to the number of new students certified through their store. This in turn resulted in stores placing an increasing emphasis on teaching. Some stores going as far as to build indoor pools specifically for teaching certification classes.

Since it serves the interests of everyone in the diving industry, certification agencies are under constant pressure to increase the number of certifications. This pressure translates into not only direct attempts to increase the number of divers, but also to increase the number of instructors. More instructors mean more students and also mean more prestige and exposure for the certification agency. However, increasing the number of instructors has the unanticipated effect of reducing their economic worth through forces of supply and demand. As the number of instructors increase, dive shops can more easily replace existing instructors with new ones, thus driving down salaries and instructional fees.

While that might seems to be very much in keeping with classic marxist exploitation, there is a socio-historical quirk in the system that in effect defeats the shop owners advantage. Since in the "old-days" there were no dive shops to be affiliated with, certification agencies allowed instructors to teach classes on their own making their own arrangements as far as finding swimming pools to use and so on. These independent instructors continue on to this day. Many find it to be a rewarding second career to daytime jobs. However, these independent instructors are free to charge as little for their courses as they wish. In a market with too many instructors and too few students, the independent instructors prevent dive shops from effectively fixing the price of certification classes*. The result is a competitive battle that keeps the cost of certifications close to the break-even point for either the independent or shop instructor. For example, it has been said by local instructors that class prices are almost one hundred dollars less in Northern California than in

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* Two certification agencies: SSI and NASDS allow only dive shops to certify students. In addition to the reduced paperwork, this policy can be seen as a move to reduce competition for dive shop based instruction. However, since SSI and NASDS represent less than 20% of the total divers certified, this approach has had a minimal impact on the general economics of diving at least in the Northern California area.

Southern California.

Thus as summarized by figure-3, recreational scuba diving economics has produced one very strong trend with important social implications: the industry has staked its continued growth on constantly certifying new divers. While the forces for this are diverse, the effects focus on that one effect with surprising concentration. This conçentration on producing new students not only makes the dive industry more willing than ever to accept women divers, it has started to make significant concessions to the women diver. Discovering that the money of women divers was every bit as green as that of male divers, the industry has introduced colorful dive equipment and been quite successful with it. According to the retail grapevine, the Tabata company basically established its multi-million dollar retail trade on that gimmick alone. However, as argued by O'Neill and Morgan among others (O'Neill & Morgan, 1992) the advent of color coordinated dive gear has often come at the expense of function.

Bringing in new women students has not as we shall see changed the diving culture all that much, but what made the influx of new women certainly tolerable was the resulting high dropout rate. The overall dropout rate is around 70% (PADI International, 1988), and Bondy reports that women have traditionally "dropped out sooner" (Bondy, 1993). It should be stated that the high dropout rate has mostly to do with a lack of social infrastructure to support the number of new divers (of either gender), but certainly discriminatory practices within the diving culture are responsible for some of that dropout.

Thus, in review recreational diving should not be viewed as being any more progressive in its handling of women. What entry has been made available to women was done for the sake of old stereotypes and exploitative role models. Once that door opened, it was opened wide by an industry hungry to certify anyone willing to invest in the necessary training materials and courses. Because the true safeguards to the diving culture were informal and communal in nature, there was little risk of large scale changes to diving culture. Instead, women were exploited for financial gain, without being given the access to the diving community their certification card would seem to promise.

3) The structure of sex discrimination from an individualistic perspective: While discriminatory practices are themselves generated at a cultural level, it is a useful first perspective to

consider the discrimination from a more individualist perspective. When women seek to become involved in diving at all levels from seeking to purchase diving equipment, to trying to find a dive buddy, to seeking leadership roles in diving, they face a myriad of interactions. Those interactions tend to either reduce their self-worth as members of the diving community or worst treat them as objects to be exploited. For example, while the vast majority of diving advertisements feature women, rarely do those advertisements actually advertise equipment designed for women divers. Dive shops tend to be staffed by men, and diving activities and institutions clearly have male stereotypes in mind.

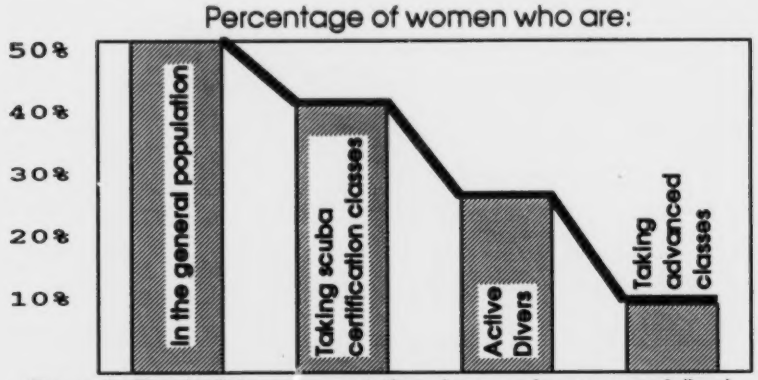

Figure 4: The declining representation of women in more specialized diving activities

However, a simple "male as bad guy model" of diving is badly misguided. For many divers (of both sexes) the ideal diving partner is/would be their significant other. Diving couples are a common occurrence and for better or worse, one of diving's major selling points is the romance of it. Thus, it would seem that gender relations in diving rest on what is essentially a contradiction: on the one hand diving is a male dominated sport where women do not belong. Yet, diving is a sport where women are not only welcome but indeed often sought after. Like other social contradictions, it results in a curious set of social interactions that serve to provide local "patches" to a set of otherwise incorrigible relations. Such contradictions lead to serious fracturing of an individual's social identity.

The curious predicament of the manager of the Below Venice* dive shop illustrates well the tension between individuals and the larger cultural norms. Having recently divorced after a long marriage, he has been forced to make the traumatic and ego-bruising transition from married life to that of a active single person. As manager, he must maintain the macho image of the successful virile male who regularly conquers those ladies (both customers and students) he encounters, even if that image is nothing more than lies and playacting. It is only to a few trusted friends that he will confess his sheer terror at even dealing with women professionally, and his absolute fear and reluctance to ask anyone out.

3.1) The patterns of discrimination: Diving nevertheless does discriminate against women, but it does so in arguably curious ways. Data collected suggests at least 3 distinct types of discrimination: active discrimination, passive discrimination, and cultural clash.

Active discrimination is a more insidious and troubling aspect of the diving culture. Research in progress suggests that sexual discrimination is very much a part of the diving culture and not simply a result of a "few bad apples". Women are simultaneously characterized as property to be exploited, incompetents that must be tolerated, and weaklings to be cared for. Intriguing in this characterization is the inherent inconsistency. While women are considered a burden, men feel it their duty to take special care of women. Equally, women are supposed to be "taken care of" even if at the same time they are "commodities" to be used without regard to their concerns and interests. The inherently contradictory nature of diving culture's view of women places men in a disorienting position where often two distinct courses of action are equally viable.

A good example of the conflicting male role model comes from a rescue diver course where an instructor was flirting with a student. For some time the instructor had been both making suggestive comments and taking advantage of a demonstration to physically handle the woman. However, in the process of removing her buoyancy compensation device, he managed to tangle and then pull her hair. When the woman screamed over this, the tone of interaction changed completely. The instructor aggressive and domineering tone immediately changed to one of concern and regret

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* Below Venice, like Rockfish Scuba, is also a pseudonym. It is a smaller family own dive shop in a more affluent city in Northern California.

over her discomfort.

The event is especially informative with the additional knowledge that the instructor and woman are good friends (but nothing more), and otherwise the instructor has a good reputation for dealing with women. Yet, one cannot escape the absolutely paradoxical nature of the behavior: on the one hand if the instructor is truly concerned for this woman why does he harass her? On the other hand, if it is okay to harass women, why bother being concerned about them?

Another example of a similar contradictory nature is this exchange during a divemaster's class (in the section on ethical handling of students). The instructor comments: *Don't pick up on the girls until after the class.* When a female student objects, he makes the following "politically correct" modification: *Don't pick up on the girls/guys until after the class.*

The exchange is interesting in that while at a syntactic level it appears to be conciliatory to women, the meaning of the statement is basically unchanged after the correction. While the discussion was on teaching ethics, the statement is clearly exploitative of students, and given the continuing asymmetries in gender power relations is particularly targeted against women. On the other hand, the interaction is as contradictory as the first. If it is okay to treat women as sex objects, why worry about their feelings (particularly issues of vocabulary). Yet, if it was important to make politically correct statements, how can the statement be made in the first place?

Passive discrimination is in an important sense a form of ignorance. Examples of passive discrimination include the relative lack of equipment that is suitable for women (Buoyancy compensators designed for women's anatomy, wetsuits in a variety of sizes reflecting the diversity of women, and so forth). More significant is the comparative lack of research on the effects of diving on women's physiology (Viders, 1993). These matters while seemingly benign on the surface are probably indicative of more active discrimination on the part of the diving establishment.

Passive discrimination can be seen as either directed specially at women or perceived as a more general lack of sensitivity by the diving establishment. Consider two episodes where the gender of the person in charge made a large difference in the outcome. 1.) After getting a class into the water, a male instructor notices that women with long hair are having trouble with hair getting

tangled in their gear. At this point he tells the women (in a slight tone of reproach) that next week they should have their hair up in some sort of bun. 2.) A woman goes back to try on some rental wetsuits, before she gets to the changing room, a female shop employee suggests that she remove all her jewelry including earrings.

The difference between the two events is intriguing both because of the situated nature of the apparent ignorance, and yet, how ignorance isn't quite sufficient to explain the phenomenon. It is simple enough to imagine that it is harder to understand difficulties one hasn't personally experienced. Thus male instructors can be forgiven perhaps for not paying heed to the unique problems that jewelry and hair styles more commonly (although not exclusively) born by women. It might well be argued though that certification agencies should well make awareness of such problems an integral part of instructor courses. However, ignorance issues not withstanding, one still has to explain why the male instructor choose to be anything but sympathetic to the women's plight. One has to suspect a model of "women as nuisance" at work.

Another example of passive intolerance fits into the model of gender mis-communication popularized in the book: *You Just don't Understand Me: Women and Men in Conversation* by Deborah Tannen (Tannen, 1990). An instance of this occurred when a couple came to rent dive gear. The woman squeezed into a tight hood and had trouble getting it off. The man proceeded to rip the hood off her face, hurting her nearly to the point of tears. When she exclaimed: *Some dive buddy you are!!* his reply was: *don't worry, there will be other people for you to dive with on the boat.....*

What makes the exchange interesting is the mismatch of communication that is apparent in the verbal exchange. From the injury the woman received and the gestures and tone of voice it was clear that her comment was in fact a complaint about the man's rough treatment of her in removing the hood. But, precisely as Tannen suggests, the woman's comment is quite indirect. The man's comment, however, is not satisfying precisely because it is such a direct solution to what appeared to be the posed problem of getting a better dive buddy. The man's pragmatic solution misses the entire point that he has hurt his partner, and that what she really sought was an apology or at least some expression of regret for hurting her.

Discrimination aside, there is yet a more serious division between men and women. *Cultural clash* is definitely suggested by the diverging interests of men and women in diving. For example, while large group of experienced male divers will specialize in hunting, women seem less interested in particular specialties and are more likely to take up photography. This point is well illustrated by the fact that local underwater photographic clubs are well integrated in terms of both membership and leadership. In contrast local spearfishing clubs are not so balanced and seem to indeed harbor a greater degree of discrimination as suggested by clubs that have no women members at all.

Interview patterns suggest a fundamentally different approach to the marine environment. Women emphases the beauty of the underwater world and express a respect and compassion for the creatures that live there. Women also find the actual practices of underwater hunting rather revolting. This isn't to say that some men aren't in perfect agreement with women on this point (the author being one such man!), but in general men seem more concerned with the challenge of diving and thus, the hunt. Men make heroes of successful divers and go to great length to document their successes.

In Bondy's article on women and diving (Bondy, 1993), she enthusiastically embraces this difference. To quote:

> With the introduction of so many women into the diving world, it is no wonder that attitudes about diving are changing too. In short, women are helping make the diving world a "kinder,gentler" place. It is no coincidence that a keen sense of underwater awareness has developed in the past 5 years or so. . . Taking game is no longer taken for granted, and reef protection is paramount (p-17)

Bondy goes on to quote Thomas Young, a dive instructor in Southern California, who claims: "with men, diving is sometimes a macho thing. They want to explore, but they also want to be hunter-gathers". Bondy then goes on to paraphrase Young's view of women as: "Rather than being conquerors of the deep, however, women seem more satisfied to hang back and observe their surroundings, gaining an appreciation for the ocean and the sport" (p18).

This sort of split is consistent with gender differences hypothesized by feminist scholars like Cook, McCalla-Vickers, and Oakley (Cook & Fonow, 1990; McCalla-Vickers, 1982; Oakley,

1981). Oakley argues that the problem is more fundamental in that she claims all of the human scholarly enterprise (and by implication society in general) is tainted by macho ethic of confrontation and objectivity. McCalla-Vickers recounts her own struggles with traditional scientific methods, and her eventual realization that those methods embody those two ethical norms that she feels are not as natural to the female experience. She claims (and is supported by scholars like Sherry Turkle (Turkle, 1988) and Deborah Tannen (Tannen, 1990)) that women have more natural modes of expression and existential being that operate through consensus and subjectivity. On this perspective women face an intrinsic bias in just about everything they do precisely because our culture is so based on a positivistic stance to the scientific enterprise.

Given this perspective it isn't at all surprising that women might be more attracted to subjective and interpretive art of photography, while men would find more satisfaction in the objective and demonstrably clear world of spearfishing where success can be measured without question.

The notion of a cultural clash along gender lines is certainly not an easy distinction to make. For example, one might well argue that the differences between spearfishing and photography are actually more an example of class differences rather than gender differences. Certainly underwater photography requires greater financial resources, and indeed one might argue that the repulsion to the "dirty business" of killing fish is simply an expression of white collar ignorance. Certainly contrasting Rockfish Scuba and Below Venice is supportive of that claim. Whereas Rockfish Scuba emphasized its inventory of spearguns and parts for its working class customers, Below Venice keeps a considerable amount of underwater photo inventory in the main counter by the register.

Perhaps a better example was the roundtable discussion on gender and diving held by the author last year at the Seaviews conference (Lagache, 1992b). While the initial discussion between the panel audience focused on gender issues, the panel was divided deliberately not only along gender, and age lines, but class and diving specialty. The last few minutes of the discussion had shifted the topic of discussion completely to a debate on the ethics and appropriate methods for handling underwater hunting. It should be added that the discussion had representatives of both genders on both sides of the dispute!

However, while class distinctions clearly play a role, that alone does not provide a sufficient account of the phenomenon, since after all, women are not any more likely to be found in the higher classes than in lower classes, (indeed the present feminist argument is that the opposite is true). Thus, if class were the only predictor of hunting/photography split we would have no reason to expect any differences in gender participation. An alternative explanation would be to suppose that gender discrimination is more prevalent in the lower classes thus restricting women from following their true interests freely, but that would a difficult hypothesis to verify given the variables involved.

Another interaction that must be taken very seriously is the role of history and culture. As already noted, recreational scuba diving has a very strong cultural basis in underwater hunting (Eyles, 1985). Participants in the diving culture feel a need to "pay homage" to that history even if that isn't their main interest. Both the owner and manager of Below Venice have done some underwater hunting/gathering even if that isn't their main interest. Curiously the female diving instructor who was on the gender and diving panel at Seaviews also made a point to say that she had proven herself as an underwater hunter (Lagache, 1992b).

Thus, the issue of "culture clash" is a muddy one at best at least taken from the perspective of individual interactions. On the one hand, it is clearly the case that the phenomenon is confounded by both class and historical interactions. As much as Bondy might wish otherwise, the growing interest in environmental awareness in diving is much more a result of broader societal trends than simply the increasing number of women involved with diving. Very much opposed to Bondy's view, it will be argued later that women have at best a limited access to the diving community and thus, are in a poor position of affecting change.

Nevertheless, there is a strong and historically acknowledged belief in such a split in values among male and female divers, and that split is precisely of the sort that would have been predicted by feminist scholars (Cook & Fonow, 1990; McCalla-Vickers, 1982; Oakley, 1981). Although, this change in epistemology is certainly not unique to feminist thought, but is central to the whole postmodernist movement (Burke, 1985; Heidegger, 1927/1962; Kuhn, 1962; Lave & Wenger, 1992; Mishler, 1990; Packer & Lave, 1991; Star, 1991) in a way the whole postmodernist movement could be thought of as attempting to "feminize" our male dominated culture of

knowledge production and validation.

3.2) Responding to gender bias: Women faced with discriminatory treatment have developed a number of coping strategies. Some women simply limit their involvement (the worst case abandoning the sport). Others avoid continuing education and other male dominated aspects of the sport. While women are just as likely to express interest in continuing education classes as men, only 10% of them actually go on to do so. Another coping strategy is to allow a male partner or other authority figure to serve as the intermediary in dive culture interactions. This strategy as it turns out plays a critical role in the disenpowerment of women within the diving culture, and yet it represents the only way for many women to overcome the extremely hostile environment that the diving culture can be particularly to single women.

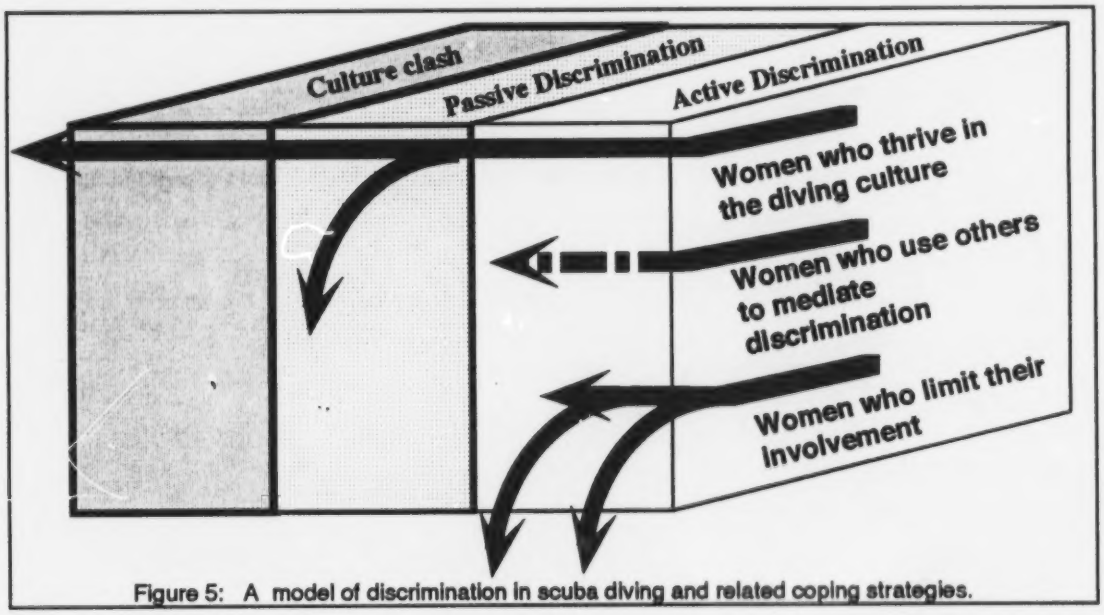
Culture clash
Passive Discrimination
Active Discrimination
Women who thrive in the diving culture
Women who use others to mediate discrimination
Women who limit their involvement

Figure 5: A model of discrimination in scuba diving and related coping strategies.

Still other women seem to thrive in an environment of discrimination. These women vary from those who simply demonstrate so much determination as to "bowl over" the sexist establishment, to those who exchange some harassment for a sense of community. Alas, such successes are never

without a price. In the case of the most successful women it is a price paid in terms of an uncertain identity. Some women so succeed at being "one of the guys" that they become unable to effectively function in areas where women historically need to be "traditional". For example, while it might seem to be a key advantage to be able to spearfish "with the boys", that leads to considerable difficulty when relationships form and the woman is confronted with the contradictory demands of being a "good little woman" and yet not lose her status as "one of the boys". Even interpersonal issues aside, the demands of becoming an accepted participant within a particular subcommunity of diving may represent taking on identity very much at odds with a woman's "natural" nodes of worldly engagement (Turkle, 1988). This fortunately will vary from subcommunity to subcommunity and again will be influenced by other confounding factors such as class. Certainly it seems that the subcommunity of instruction is somewhat less of a barrier to women than say underwater hunting. Nevertheless, as it will be noted later in section-4 single, unattached women face a constant relentless bombardment by men seeking to change that status. Where other pressures may be tolerable, this pressure can often be the straw to break the camel's back.

Nevertheless, the women who can function independently in the diving culture are a minority. The majority of women divers appear to be bound to a male partner who serves both to shield her from discrimination and to mediate her access to diving. Should that relationship end, there is a good chance that woman will stop diving as well. As will be noted in section-4, the diving culture is so constituted to insure that the only long term role women can have in diving is one of subservience to men.

3.3) Assessing the effectiveness of the coping strategies to sexual harassment. While in some sense it is quite clear how to rank the coping strategies, developing a clear assessment of their effectiveness is more difficult. It seems clear that establishing an independent social identity is in fact a critical ingredient to succeeding in diving. In keeping with Eckert's analysis of the high school experience (Eckert, 1989), it isn't until one has obtained "knowledge making rights" can one begin to construct their own sense of a domain or culture. However, such rights are never given unconditionally, and it is those demands on individuals that represent the required accommodation to a given culture's norms and practices.

What can be said from the ethnography about those women who have succeeded in establishing their own individual identity is that they are very few and their status in diving seems fleeting at best. The scarcity of such women makes them prized objects, and thus the pressure to enter into a relationship is extreme. Again as noted earlier, issues of class and social convention are critical. The trajectories of participation in organizations like diving clubs appears to be quite different than those say working in dive shops.

Thus, the second coping mechanism in fact represents the vast majority of women divers and is truly a continuum. For some women, a significant other serves no other role in diving than to avoid having other men trying to "pick them up". However, the dependence can (and often is) much stronger. Some women need to be insulated from the active harassment and potential intimidation into actions that aren't in their best interest. The obvious and probably most common scenario is harassment in rental settings, but this can include diving in conditions not appropriate for a woman's conditioning or skill level, or engaging in activities that are considered unsafe by certification agencies.

This sort of phenomenon is no different than what is seen is society at large and is analogous to situation faced by women seeking automobile help. Again issues of class and in this case business ethics apply, but like diving, automobile repair has succeeded in maintaining a hostile culture to women long after general social forces became intolerant to such practices.

Of the final strategy, it seems fairly clear it is a losing one. Diving is inherently a social enterprise. Without contact with that social world one not only loses access to the pool of potential dive buddies, but also access to the enormous pool of culturally embedded knowledge. Women (and men) in this predicament are unlikely to escape the spiral decline of decreasing involving leading to decreased access to the diving community which further decreases access.

Curiously, diving personal ads in magazines like California Diving News represent one possible escape from the paradox of limiting one's involvement. One woman the author is familiar with has used "dive buddy wanted" ads as an effective screening device. Instead of having to go into the diving community in search of buddies, she has dive buddies seek her. Unfortunately, this tactic was not without its pitfalls. Shortly after placing her first ad she became romantically

involved with a male instructor, only to conclude after about a year that the relationship did not have any long term possibilities. After a long withdrawal, the woman has returned to the want ads - where hopefully she will have more success. This short episode nevertheless points again to the apparently very strong tendency for women to become involved romantically with some partner once she starts to dive. A look at the a more cultural perspective may illuminate the reasons why.

4) A cultural perspective on gender relations in diving - a look at trajectories of participation. Certainly in our day and age we are familiar with the notion of discrimination. Discrimination is, however, in some sense too limiting, it serves as a set of blinders that while focusing us on critical issues leaves more insidious areas unexplored. It is Marx that is credited for launching a new and quite different analysis of how social forces can work to disempower a group. Having taken a look at the more direct interactions that impact women, it should now be fruitful to consider some of those more subtle socio-historical interactions that play a deeper role in restricting women's access into the diving culture.

The traditional sense of what scuba diving was all about perhaps could be sloganized as: "it's all about gear and skills". Certainly if one looks at the curriculum of an open water class (PADI International, 1991b) what one will find is a collection of skills to be learned with the diving equipment. Yet, from a Sociological/Anthropological view the notion of skills is totally inadequate to characterize the activity of recreational diving. Faced with this inadequacy research has evolved from practice theory (Bourdieu, 1972) to a notion of communities of practice and participation with those communities (Lave & Wenger, 1992). Carlos Eyles in his inspiring book The last of the blue water hunters (Eyles, 1985) characterized his community of spearfishermen as a "tribe". The notion of a tribe sits rather well with a notion of divers forming communities to engage in particular practices related to diving. Such subcommunities in fact serve as the nucleus of the specialty focus of the 3rd level of participation of the model described in section-2.

Communities of practice are somewhat unique in that the character of the community and practice are dialectically related and mutually constitutive. For example, one could take the point of view that the practice and not the social relationships plays a central focusing role. In the case of Eyles' spearfishermen, it certainly wasn't necessary for everyone in the "tribe" to be free before a dive trip were planned. On the contrary, the tribe served as a pool of divers from which enough

members could be drawn to justify the trip. But at the same time, the notion of a community was just as critical, these spearfishermen couldn't just recruit any diver for the type of diving they were interested in. Like the tribes of hunters, Eyles' community of spearfishermen were men who had shown their competence in the particular practice of breathhold spearfishing. Moreover, one could flip the point of view and claim that the community and not the practice is the critical fixture, since after all, there was a time when these men did not hunt in blue water. The practice of blue water hunting thus arose from a particular community of divers seeking new challenges.

4.1) Women and communities of practice: Because diving is a complex enterprise that involves the coordination of social and technical challenges, it turns out that much if not most diving is conducted by communities of practice (Lagache, 1992a). Moreover, groups tend to have some focused activity beyond simply diving. While it is certainly possible for divers to organize diving expeditions without such a social network, in practice it appears to be almost prohibitively difficult. In keeping with the account of learning offered by Lave and Wenger, communities of practice serve as sites of local expertise. Divers in communities of practice pool and share their knowledge about all aspects of diving from safety to parking. Divers outside those communities suffer from a lack of such expertise and endure consequences from logistical hardships to a potentially increased risk of diving accidents (Lagache, 1993).

For that reason it is very important to consider how women interact with those communities. If for some reason women are not able to become part of such communities they appear to be at a much greater risk of dropping out.

However, informal interviews and participation in diving along the Northern California coast has uncovered a rather surprising fact. Women do not seem to become involved in communities of practice in the same way men do. Instead women seem to dive in only one of two extremes: either with people with whom they share a significant personal relationship (a friend, relative, or lover), or someone who is a relative stranger such as being paired with another lone diver on a dive boat.

It is difficult to obtain exact statistics on such matters, but the trend does seem to hold both with respect to statistics collected on divers planning trips, observations of divers, and interviews. If true, it suggests a considerable difference between the way women and men approach diving and the

access they have to dive activities. It is thus a matter needing further analysis.

One possible way to consider such information is to look at possible explanations. Certainly a quote from a woman divemaster suggests some of the forces that could be at work: *There are only two men who will dive with a woman: the man who dates her, and the man who wants to.* Since the beginning that particular mystique of romance has been cultivated within diving and that mystique affects women and men divers quite differently.

Since women remain a comparatively scarce "commodity" in diving, there is considerable pressure on a women diving with other single men. These pressures come from various sources not the least of which is the romantic images advanced by the diving community and industry. The results are likely to be either a relationship or sexual harassment (undoubtedly in some cases the former simply a sign of resignation to the later). The number of sexual advances toward women appears to be quite high and a looming problem for the whole industry. One woman the author spoke to learned with surprise that it is considered highly unethical for instructors and divemasters to make advances toward women students. She exclaimed "I thought you were supposed to date the divemaster". A woman instructor for Below Venice commented that one of the great reliefs of becoming engaged was that "the hits stopped coming" and she could simply enjoy diving undisturbed.

Even women with serious relationships are likely to still encounter sexual harassment of some kind, particularly if their significant other is a non-diver. However, relationships pose new problems for women who wish to dive with groups. Certainly in our society women do not have the same freedoms as men do when it comes to spending time away from significant others. While it is culturally accepted that men can take time to pursue their own interests, women do not yet have the same access. Given the asymmetries of male-female relations in diving, the risk of a male partner becoming jealous is certainly not small (especially if they aren't divers). Finally, women will be expected to dive with their partners should they both be divers, that limits the remaining opportunities women might have to participate with other divers of their own choosing.

All these forces tend to channel women into close relationship with male diving partners or at least away from diving with men (and presumably in many cases diving all together). The

asymmetries of male-female relations have the effect of denying women a chance to simply be "one of the gang". However, denying women access to the role of "simple ganghood" has far reaching consequences that are almost tantamount to denying entry into communities of practice. Just as the "tribe" of blue water hunters relied on a pool of members to support dive trips, all communities of practice depends on a certain amount of fuzziness in order to both support the practice and the community. The matter goes far beyond the ability to fill up a diving trip; in fact it undermines the essential co-constructive relation between community and practice. Just as an apprentice (sorcerer or otherwise) has occasions to take on the role of the master, divers within a "tribe" are given the occasion to play many roles in many circumstances. This not only provides valuable learning experiences, but spreads expertise across the community as well.

At its roots a woman cannot be just like "one of the guys" because she simply isn't just another guy, she is sadly enough a commodity. A single woman is a prize to be captured, all issues of diving aside. A woman with a relationship is "owned" by some man. While the status of ownership serves to insulate her from further attempts at conquest, it has the unfortunate effect of also encapsulating her away from other men who now feel that they must treat her differently because she "belongs" to someone else. Thus while a "guys are guys" and they can slip into many different roles, a woman is marked by the masculine relationship to her gender.

The effect of denying women full access into communities of practice is best illustrated by examining demographic data on where divers participate. The author's work on how diving functions as a broad community of practice has found that the progression of divers through the model shown on figure-2 fits very well the Lave and Wenger notion of participants moving from peripheral to more central roles within the community of practice (Lagache, in preparation).

Figure-6 is taken from survey data from Rockfish Scuba during the fall and winter of 1991. It plots the percentage of divers who participated in a given activity at particular points in their diving career. Consistent with the model on figure-2, divers in their early stages of their career are mainly involved with sightseeing. However, beyond 5 years of diving experience sightseers had virtually become extinct, while divers engaged in diving specialties predominate that "age" group. It isn't until one reaches the 20+ years in diving mark that sightseeing makes a comeback. At best, a 25 year ago diver is likely to be at least 45 years old, and is more likely to be in his 50s (he is also

likely to be a man since there were still very few women divers in 1968). Such divers are oldtimers in the participation model and because of age and physical condition (among other factors) may not be able or willing to continue being involved within the subcommunities that practice specialty diving.

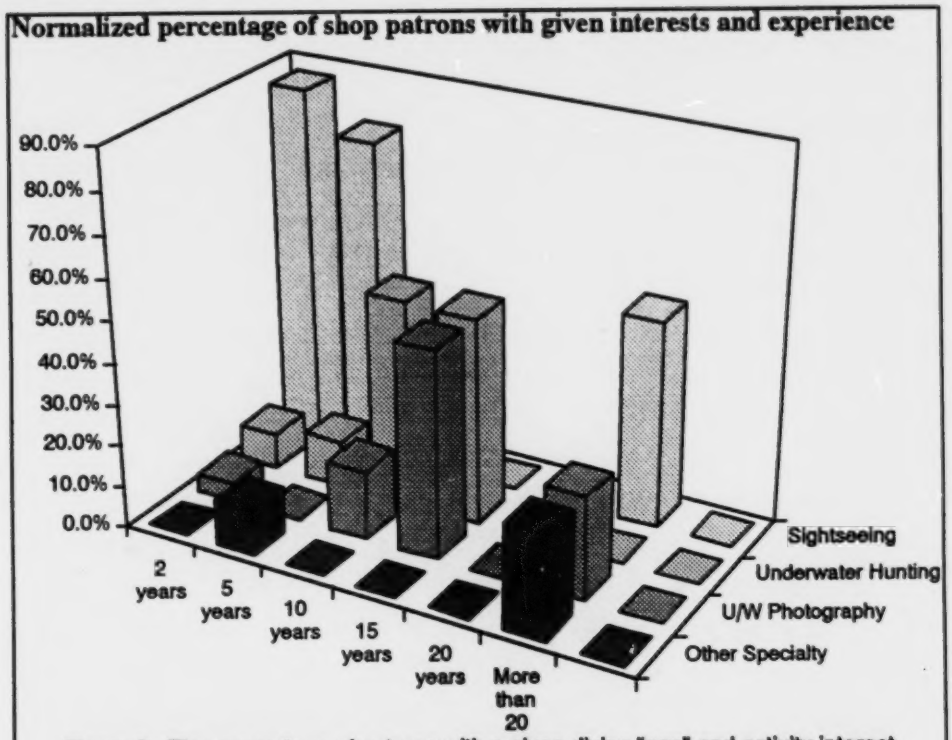

Figure 6: The percentage of patrons with a given diving "age" and activity interest normalized for the number of divers in that "age" group (from Lagache, in preparation)

For those concerned about women and diving the implications are clear. Beyond a few years, there basically aren't any divers who haven't managed to penetrate into some specialty subcommunity of practice. However, since women are not allowed simple access to such communities of practice, their ability to continue in diving is severely hampered. So long as women are tagged by their gender, they cannot serve as independent members of specialty communities of practice. They have only two options: either become "attached" to some male, or accept constant

-30-

and open harassment. Under the circumstances it is little surprise that women drop out sooner than men.

The effect of such a cultural system is the effective and virtually complete subjugation of women into subservient roles for male divers. While this does not imply that there aren't any women divers who have been active for more than 5 years, it does say that most of those women divers have been forced into stereotypical role models. The effects are different depending on the particular subcommunity. Some hunting communities are strict and harsh, no women are tolerated. This isn't to say women aren't allowed to join hunting clubs of this type - such a policy is of course absolutely illegal and organizations like the Peninsula diving clubare well aware of this. Such groups maintain a difficult tension between apparent compliance and implicit segregation.

Other dive groups like local underwater photographic clubs appear to be more than integrated, and in fact have women in positions of leadership. But such clubs also support the cultural practices that subjugate women. Little things like a mailing list that is designed to accommodate couples and an oral history that is filled with little stories of club members becoming married. The club roles are indicative of the success of that stereotype. Almost 54% of the club members are joint memberships and only 15% of the women club members are not attached to club member! In contrast, 31% of the club consists of males unattached to women members. Given the fact that the scuba diving population represents something on the order of 1% of the adult population, this concentration of two diver (to be precise a couple of underwater photographer no less) seems most unlikely to have arisen by chance. As argued earlier women cannot attain an independent status within diving subcommunities. Where women are found within diving specialty subcommunities they will be found in relationships. In this case more than half are members of the same club!

It is important to note that this sort of subjugation is rather different in character to the more blatant discrimination noted in section-3. Women in this club feel perfectly content and satisfied in their roles, since after all there is a considerable socio-historical tradition of such relationships. Even a diehard feminist might fail to note the lack of freedoms to be independent in her diving and

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* Yet another pseudonym

instead note the positive aspects of enforcing her existing relationship. Certainly in some respects this is genuinely good and appropriate. The point of some concern is when women lose the freedom to pursue diving in their own independent way. As it stands, the myth of women advancing in the diving culture is exactly that. While women have been allowed into the culture, they entry has been in roles that insure their continued subservience to the dominating cultural norms and practices.

4.2) The missing tribe of women divers - some speculation: The asymmetry in male-female relations appears to be a very plausible mechanism for why women might not be equal participants in communities of practice where men are involved. However, that leaves one rather curious mystery: why are there not communities of diving practice that consist of only women? While representing something of a surrender to a male biased world, it still would provide women with an opportunity to enjoy diving undisturbed by the above sexual obstacles. Even women who are involved in significant male relationships would seem be benefit from such arrangements in that both the jealousy and sexual harassment problems would be resolved.

Curiously, the only two observed examples of what appeared to be strictly female communities of diving practice came from the lesbian community. That success, however, may well have a negative effect on heterosexual female divers. One woman divemaster expressed the fear that organizing women to dive together would be "dikish". Certainly the perception of lesbian activity could discourage women divers from diving exclusively with a female group. However, it seems very unlikely that this could be a significant detractor from women forming communities of practice since for many women, their only dive partner is also a woman. Hillary Viders reports of one such club on the east coast called "Aqua-Woman" (Viders, 1992) however both the circumstances of its formation (formed as the result of a challenge to make an all woman wreck dive), and simply the fact that it represented a story unique enough to be notable, suggests it is more the exception that proves the rule.

It might well be the case that women avoid the social organization of a community of practice precisely because of its male connotations. Certainly any woman who might have been caught in the "lion's den" of a group of mainly male divers might understandably develop an allergy to not only male divers but male social organizations as well.

One might speculate that perhaps women simply find a certain foreignness in the way that one becomes in some sense "nameless and faceless" within a community of practice. It is becoming common knowledge that men and women approach friendship differently (Tannen, 1990; Turkle, 1988). Given the fact that women tend to have fewer friends to whom they feel stronger emotional bonds, one certainly has to ponder how the female tendency toward fewer deeper friendships would interact with communities of practice where in some sense one is expected to have communal friendship with everyone, but no especially strong ties to anyone. Certainly, there is a tempting association between female diving patterns and the tendency toward fewer friendships. However, as the preceding paragraphs have amply illustrated, the issues here are much too complex to permit such simple interpretations.

There are two more possibilities that both involve the notion of history: one benign, one sinister. The first is that simply there has not been enough time for women to be able to construct their own historical roots for a community of practice of their own. It is worth noting that there can be very few women oldtimers because there simply were very few women certified during diving's birth and teething. Most of the communities of practices now existing in diving are built on cultural roots at least 10 years old, many much older than that. Since it has been correctly diagnosed that women haven't even had the option to enter diving until quite recently, it may simply take time for new diving communities like the Aqua-woman to form, strive and produce seeds for future generations of women divers.

While that seems plausible, it is contradicted from what scant data comes from the lesbian diving community. Only information fragments could be acquired from that faction of the diving community, but what did seem clear was that is was very much an independent part of the diving community and that it represented its own practices. It seems reasonably obvious that given the stigma of homosexuality, women who sought to dive openly with their lesbian partners would have to do so quite apart from the rest of the macho diving population. Thus, the lesbian diving communities are very much communities of practice - of necessity. Yet, if the lesbian diving community could construct its own practice of diving, why couldn't "straight women" do the same? Perhaps the answer lies in the essential nature of human history.

5) Conclusion, reflections on the fundamental paradox of historical constitution of self.

Feminism is faced with central paradox that is ironically presented to it by one of its allies in the attempt to dethrone positivism. It is from the naive scientific point of view that we get the distinction between men and women. After all one only need to look at the biology or physiology to come to understand the essential differences. Over a hundred years after Marx, our culture still basically accepts this view despite of its paradoxical shortcomings in many areas from the notion of equality in work to its inadequacies in characterizing the nature of relationships between the sexes.

What Marx and others after him had centrally grasped was that our essential identity is not some rigid hard sphere of a physics experiment. On the contrary, it is shaped and adapted by not only our surroundings, but our history. Heidegger's (Heidegger, 1927/1962) central contribution was to construct the individual not out of atoms and molecules, but out of her/his cultural past and projected future. To paraphrase Heidegger, our "being" is thrown into a pre-existing social world, and it is only in using that socio-historical material that we can project forward into our future (Packer & Lave, 1991).

The beginning of this paper considered the question of "location". For the feminist scholar the question is from where can she/he launch her attack against masculine culture? From the biological perspective the answer is easy, she is simply a woman (and men simply have no say). However, from a socio-historical perspective this isn't an answer. Women are no more ahistorical objects than men, or their cultures or institutions. What is the history of women - all women? All women are indeed a product of the sexist culture they then seek to criticize. To return to Heidegger the only social "stuff" feminist scholars have to make their attacks with, is precisely the very same stuff that produced the sexist world they seek to attack.

For the feminist scholar this presents the unnerving risk that attempts to transcend existing inequities may still carry seeds of other inequities out of which a social self was constructed. Eckert has persuasively argued how social categories like class and gender are reconstructed through social practices in the high school (Eckert, 1989). She has also noted how language itself plays a role in constructing gender relations in our society (Eckert & McConnell-Ginet, in press). The analysis cannot assume a privileged position in the system. All women are products of our social structure. Women who seek to analyze that social structure need to take that into account as

part of the analysis.

This analysis is presumably only possible because the location I hold within society. It is also because the voice I have constructed for myself out of the resources available to me. What has been described here is true in its own interpretive way. Where some communities of practice embrace it, others will undoubtedly rebuff it, and still others will find it inaccessible. Nevertheless, this does not reduce to vulgar relativism, because these distinct communities are also completing their own trajectories of participation within the larger communities of scholarly practice and their responses can also only be shaped by the historically constituted resources available to them.

What is true of analysis is also necessarily true of change. Since human beings are bound to their socio-historical roots, they can no more transcend it than they can change their past. That places limits on how change can happen.

Bourdieu argues that our own practices are inaccessible to us for reflective inspection (Bourdieu, 1972), and Heidegger argued vigorously that the attempt to make in situ knowledge accessible to inspection fundamentally distorted its character (Heidegger, 1927/1962). Heidegger's famous example is that of the hammer becoming a fluid extension of the hand, that extension is only broken when something happens to disturb the fluid flow of practice (like the head flying off the handle).

Direct interventions to seeking to correct sexist situations have very much the same effect as having the head fly off the hammer. It doesn't represent an occasion to correct a practice, it represents nothing short of a breakdown of a practice. Nor can new practices be rationally "inserted" to replace sexist ones, anymore than one could expect to hand to someone a power nailer and expect it to be substituted for the broken hammer (unless of course the carpenter already had an established "practice" of using a power nailer). A more relevant example is the assertions that previous dating practices were sexist. As much as the arguments are quite valid, there are no substitute practices to employ instead. Since virtually the whole population engages in some form of dating practice and yet, that practice is essentially not a matter of public protocol, changes in dating patterns have occurred very slowly and painfully for the participants.

There are important lessons to be gleaned from this analysis, but what is perhaps more important is to gain the wisdom to see the larger lesson about how change can and should be handled. For example, one might conclude that laws are needed to protect women from instructors who make unwanted sexual advances, but that overlook the fact that certification agencies already see this as a very serious matter. Nor would new efforts at enforcement be likely to be very effective, certainly not when some women carry the attitude "but I thought I was supposed to date the divemaster".

Such a example might seem to be a "cheap shot" but it in fact nicely illustrates the central point of contention: women are just as much a product of our male dominated culture. It isn't simply that men have come to seduce women, it is that women have become used to being seduced by men, and worse they condition their daughters to believe it to.

I believe a better lesson to take from such an analysis is a different way to look at the situation of women, men, communities of diving practice, and communities in general. With some insights into some of the social forces buffeting women divers, they might be better able to make use of the resources that are around them. Perhaps with a better sense of what is meant to be "just one of the boys", women will be better able to take advantage of the informal learning opportunities that they have every time they associate with other divers.

However, I suspect that men are the most in need of enlightenment, although perhaps in a curious way. The message that men should not attempt to "own" women is certainly not a new one; however, the message that men should see beyond the image of women as another man's property is not so commonly told. The matter is not so simple. For example, gender bias might exhibit itself in a hesitation to invite a woman with a significant other to a dive. I have certainly found myself in that position in the past. Yet, such hesitation not only reinforces the social stigma of women as property, but in a way reaffirms the woman divemaster's lament about the only two men who will dive with her.

Changes in attitudes will take time and will spread slowly through the diving community and society at large. In a way both men and women serve as carriers of the inequity "virus". When women stereotype all men as sexist, they inadvertently harm those men who try not to be, by

enforcing the very stereotype they wish to dethrone. Equally, men who seek to get beyond stereotypes may yet contribute to others. For example, a man might feel "liberated" in encouraging his mate to be "as good a diver as him", and yet, such simple minded attempts to bring women into diving still bring with them some notion of male ownership and with it restrictions of a woman's freedom to pursue those aspects of diving that truly interest her.

There was a time when it was felt that cultures could be changed by relatively direct manipulation. Since then it has become painfully clear that change when it happens is complex and wrought with unexpected side effects. However, this should not surprise us, since after all, those who seek to change cultures through manipulations must have a model of humanity that is rather like a collection of those hard rigid spheres used in physics. Just as one can't suppose human beings to be like that, one cannot seek to manipulate them as if they were. Whatever the primer, there is in fact only one process that will change social practice, and that is through a dialectical interaction between ourselves and our practices. Communication was clearly proven to be a slow and feeble tool in the quest for social change. Nevertheless, it has also shown itself to be the most reliable one. It is hoped that this piece will foster some progress in difficult communications between women, men, and their shared culture. May we all continue that work to the benefit of all humans.

Edouard Lagache, April 7, 1993

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